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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,824	04/13/2001	Stan S. Feather	10004936-1	4306

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EXAMINER	
CHANG, SUNRAY	

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/834,824	FEATHER ET AL.	
	Examiner	Art Unit	
	Sunray Chang	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *033103 and 051104*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. **Figures 1 – 3 should be designated by a legend such as --Prior Art--** because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1 – 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over James F. McCarty et al. (U.S. Patent No. 5,954,796, and referred to as McCarty hereinafter), and in view of Pery Andrew Pearson (U.S. Patent No. 6,470,026, and referred to as Pearson hereinafter).

(McCarty as set forth above generally discloses the basic inventions.)

3. **Regarding independent claims 1, 7 and 19,**

McCarty teaches, a method for changing address information utilized by a fibre channel controller, the fibre channel controller being associated with a port of a network device [a system and method for automatic dynamic loop address changing in a Fibre Channel environment, Col. 1, Line 10 – 11].

McCarty further teaches,

facilitating utilization of current address settings of a fibre channel controller for the network device [Since an initiator or driver must be able to manage the target device with which it is communicating, Col. 7, Line 49 – 51];

receiving information corresponding to the desired address setting of the network device [While the AL_PA is dynamically assigned, Col. 7, Line 54];

storing information corresponding to the desired address setting of the network device [the initiator keeps track of an FC-specific identity triplet for the target device, Col. 7, Line 51 – 52];

replacing the current address setting with the stored, desired address settings of the network device [While the AL_PA is dynamically assigned upon a loop reset, Col. 7, Line 54 –55].

For Node_Name and Port_Name can be used for device addressing subject matter, McCarty only discloses that the Node_ Name and Port_Name are formed from the device's unique World_wide_Name, but McCarty does not clearly disclose that the Node_Name and Port_Name can be used for device addressing.

Pearson teaches that the "Both the D_ID and the S_ID are 3-byte quantities that specify a three-part fabric address for a particular FC port", and further, "single byte AL_PA is sufficient to uniquely address each node within the arbitrated loop" that Node_Name and Port_Name can be used for addressing, for the purpose of simplifying.

It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify McCarty to use the Node_Name or Port_Name as an address as taught by Pearson for the purpose of simplifying.

4. **Regarding dependent claims 2 and 8**, McCarty teaches, determining [means, Col. 2, Line 23] whether to replace [update, Col. 2, Line 23] the current address setting [FC-specific information structure, Col. 2, Line 20] with the stored, desired address settings [updating responsive, Col. 2, Line 23 – 24] upon re-initialization of the fibre channel controller [reconfiguration of the FC environment, Col. 2, Line 24].

5. **Regarding dependent claim 3 and 9**, McCarty teaches, replacing the current address setting with the stored, desired address settings [the device come up onto an Arbitrated Loop upon a reset, Col. 7, Line 57 – 58] while the fibre channel controller is connected to a fabric topology [Soft Address scheme, the device does not care what AL_PA it is assigned, Col. 7, Line 60 – 61].

6, **Regarding dependent claim 4, 10 and 18**, McCarty teaches, replacing the current address setting with the stored, desired address settings [the device come up onto an Arbitrated Loop upon a reset, Col. 7, Line 57 – 58] while the fibre channel controller is connected to a fabric topology [Soft Address scheme, the device does not care what AL_PA it is assigned, Col. 7, Line 60 – 61].

7. **Regarding dependent claim 5 and 11**, McCarty teaches, determining [means, Col. 2, Line 23] whether to replace [update, Col. 2, Line 23] the current address setting [FC-specific information structure, Col. 2, Line 20] with the stored, desired address settings [updating responsive, Col. 2, Line 23 – 24] upon an operator [the system, Col. 2, Line 17] initiated reset [means for updating, Col. 2, Line 23] of the fibre channel controller [FC environment, Col. 2, Line 24].

8. **Regarding dependent claim 6 and 12**, McCarty teaches, determining [means, Col. 2, Line 23] whether to replace [update, Col. 2, Line 23] the current address setting [FC-specific information structure, Col. 2, Line 20] with the stored, desired address

settings [updating responsive, Col. 2, Line 23 – 24] upon a next power cycle [loop reset, 600, Fig. 6] of the fibre channel controller [FC environment, Col. 2, Line 24].

Further explanation, Applicants disclose, "whether the address setting information previously provided in block 806 is to be utilized upon a current board reset or upon a next power cycle (block 808) ". The "next power cycle can be interpreted to "reset".

9. **Regarding dependent claim 13**, McCarty teaches, a control system configured to receive information corresponding to the desired address setting of the network device [While the AL_PA is dynamically assigned, Col. 7, Line 54], store information corresponding to the desired address setting of the network device [the initiator keeps track of an FC-specific identity triplet for the target device, Col. 7, Line 51 – 52], and replace the current address setting with the stored, desired address settings of the network device [While the AL_PA is dynamically assigned upon a loop reset, Col. 7, Line 54 –55] such that a communication port associated with the network device may be recognized by the network as being associated with the current address [Once a connection is established, it can then deliver any class of service appropriate to the traffic between the two L_Ports, Col. 7, Line 27 – 29].

10. **Regarding dependent claim 14**, McCarty teaches, a communication port [Each L_Port, Col. 7, Line 21] configured to enable communication of the network device with other devices of a network [requests use of the loop when it needs to communicate with another port, Col. 7, Line 21 – 22], said communications ports [requesting port, Col. 7,

Line 23] being associated with the current address of the network device [sets up a bi-directional connection with the destination port, Col. 7, Line 23 – 24].

11. **Regarding dependent claim 15**, McCarty teaches, means for receiving information corresponding to the desired address setting of the network device [While the AL_PA is dynamically assigned, Col. 7, Line 54]; means for storing information corresponding to the desired address setting of the network device [the initiator keeps track of an FC-specific identity triplet for the target device, Col. 7, Line 51 – 52]; means for replacing the current address setting with the stored, desired address settings of the network device [While the AL_PA is dynamically assigned upon a loop reset, Col. 7, Line 54 –55].

12. **Regarding dependent claim 16**, McCarty teaches, control system is implemented via a fibre channel controller, said fibre channel controller communicating with said communication port [the OS-compatible communication interface facilitates dynamic address changing of the FC device, which changing is transparent to the OS-compatible upper-level software structures, Col. 4, Line 18 – 21].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. **Claims 17 and 20 are rejected under 35 U.S.C. 103(a)** as being unpatentable over McCarty in view of Pearson, and further in view of Neal D. Hartsell (U.S. Pub. No. US 2003/0236745, and referred to as Hartsell hereinafter).

14. **Regarding dependent claim 17**, McCarty teaches, interface being configured [Fibre Channel Manager, Col. 8, Line 22] to enable receipt of information [responding device, Col. 8, Line 24] corresponding to the desired address setting of the network device [AL_PA assignment, Col. 8, Line 13];

McCarty does not teach a graphical user interface to display to an operator.

Hartsell teaches a graphical user interface [graphical user interface, 0290, Line 9] to display information to an operator [monitored parameters maybe displayed or otherwise communicated or recorded in any suitable manner, 0290, Line 5 – 7], for the purpose of getting a more efficient network connection.

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCarty to include "a graphical user interface to display to an operator", for the purpose of getting a more efficient network connection.

15. **Regarding dependent claim 20**, McCarty teaches, current address settings are to be replaced with the address settings [the device come up onto an Arbitrated Loop upon a reset, Col. 7, Line 57 – 58] even though the fibre channel controller is not presently connected to a fibre channel topology [Soft Address scheme, the device does not care what AL_PA it is assigned, Col. 7, Line 60 – 61].

McCarty does not teach a graphical user interface to display to an operator.

Hartsell teaches a graphical user interface [graphical user interface, 0290, Line 9] to display information to an operator [monitored parameters maybe displayed or otherwise communicated or recorded in any suitable manner, 0290, Line 5 – 7], for the purpose of getting a more efficient network connection.

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of McCarty to include "a graphical user interface to display to an operator", for the purpose of getting a more efficient network connection.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lin (U.S. Patent No. 6,081,847) discloses efficient initialization, fibre channel, receive controller. Pearson et al. (U.S. Patent No. 6,470,026) discloses fibre channel loop map, fibre channel interface controller, fibre channel arbitrated loop initialization, PC port. McCarty et al. (U.S. Patent No. 6,014,383) discloses fibre channel protocol, initiator, Arbitrated Loop, lower layer protocol, controller. McCarty et al. (U.S. Patent No. 5,944,798) discloses arbitrated loop recovery, loop hang, indeterminate state, pre-specified time, transmit frame.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang whose telephone number is 703-305-8744. The examiner can normally be reached on M-F 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703)308-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-746-3506.

Sunray Chang
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August 22, 2004